

论文

基于自动增益控制调制法的高频重建技术

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**摘要** 针对我国东部油田目前急需解决的河流相薄互层储层预测中地震资料分辨率不能满足实际需求的问题, 提出了一种高频重建方法. 该方法利用地震资料极值点得到的调制函数通过与原地震资料的运算得到重建资料的高频部分, 保留原地震资料的低频部分, 得到重建的高频地震资料. 该方法计算时间较常见方法大大缩短, 参数调节非常方便, 结果保持了原有同相轴的波组特征, 避免了常见提频方法中打破原有同相轴添加新的零点产生假象的错误, 而且对比原始剖面增添了层间细节. 该方法有效的拓宽了地震资料有效频带, 并通过实际资料的处理给予证实.

**关键词** [高频重建](#) [自动增益控制](#) [调制](#)

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### High frequency reconstruction technique based on auto gain control modulation

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**Abstract** To solve the problem that the seismic data resolution can't meet the request of reservoir prediction in the river face thin-layers in Chinese eastern oil fields, a high frequency data reconstruction method is proposed. The extrema of the seismic data are used to get the modulation function which operated with the original seismic data to get the high frequency part of the reconstruction data to rebuild the wide band data. This method greatly saves the computation, and easy to adjust the parameters. In the output profile, the original features of the seismic events are kept, the common fault that breaking the events and adding new zeros to produce alias is avoided. And the interbedded details are enhanced compared to the original profiles. The effective band of seismic data is expended and the method is approved by the processing of the field data.

**Key words** [high frequency reconstruction](#); [auto gain control](#); [modulation](#)

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